

REMARKS

Favorable reconsideration is respectfully requested in light of the above amendments and the following comments. Applicants thank the Examiner for the recent telephone discussion in which claim 9 was indicated to be allowable. As suggested by the Examiner, claims 1 and 28 have been amended to recite that the rotary shaft includes a magnet and that the cylindrical rotary member is connected to the rotary shaft over the magnet.

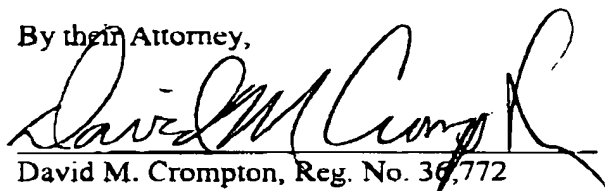
New claims 29-31 have been added to round out the potential scope of patent protection. These new claims are identical to claims 1, 9 and 28 as now pending, with the exception that each new claim refers to a compressor, rather than a turbo-molecular pump. Support for this change can be found, for example, at page 25, lines 20-22 of the specification. Thus, no new matter has been added herein.

Favorable reconsideration in the form of a Notice of Allowance is respectfully requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By their Attorney,



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Version with Markings to Show Changes Made

In the Claims:

Claims 1 and 28 have been amended as follows:

1. (currently amended) A motor provided in a turbo-molecular pump, comprising:
a rotary shaft including a magnet; and
a bearing for radially supporting the rotary shaft, wherein the bearing includes:

a cylindrical rotary member connected to the rotary shaft over the magnet;

a cylindrical fixed surface surrounding the rotary member, wherein the fixed surface is spaced from the rotary member by a predetermined distance, and wherein the materials of the rotary member and the fixed surface are selected so that the material of the rotary member has a coefficient of thermal expansion that is smaller than that of the material of the fixed surface; and

armature coils arranged about a peripheral surface of the fixed surface to rotate the rotary shaft.

28. (currently amended) A method for producing a brushless motor of a turbo-molecular pump having a rotary shaft including a magnet and an air bearing, wherein the air bearing includes a cylindrical rotary member connected to the rotary shaft over the magnet, and a cylindrical fixed surface covering the rotary shaft, the method comprising the step of:

selecting materials for the rotary member and the fixed surface so that the material of the rotary member has a coefficient of thermal expansion that is smaller than that of the material of the fixed surface; and

assembling the rotary member and the fixed surface so that the fixed surface surrounds the rotary member and the fixed surface is spaced from the rotary member by a predetermined distance.